

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

46

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
(Rev. 2-32) PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. SERIAL NO.
NHL-NP-37 10/057,311

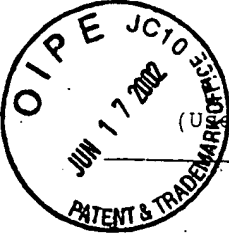
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

APPLICANT
JUNGHANS et al.

FILING DATE
January 24, 2002

GROUP
1614

(U several sheets if necessary)



U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	5 7 5 0 6 6 9	5/1998	Rüsch et al.			
AB	5 6 6 3 1 5 3	9/1997	Hutcherson et al.			
AC	5 7 2 3 3 3 5	3/1998	Hutcherson et al.			
AD	5 8 5 6 4 6 2	1/1999	Agrawal			
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
AL	2 7 3 2 9 7 1	10/1996	France			
AM	9 8 2 1 3 2 2	5/1998	International	(Abstract only)		X
AN	0 8 5 5 1 8 4	7/1998	Europe			X
AO	9 8 1 8 8 1 0	5/1998	International			X
AP						

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

5	AQ	Kreig AM, Yi AK, Matson S, Waldschmidt TJ, Bishop GA, Teasdale R, Koretzky GA, Klinman DM; CpG motifs in bacterial DNA trigger direct B-cell activation; Nature 1995 Apr 6 374:6522-546-9
6	AR	Seder RA and Paul WE, Acquisition of lymphokine-producing phenotype by CD4+ T cells; Annu Rev Immunol. 1994;12:635-73
X	AS	Melief CJ, Kast WM; T-cell immunotherapy of cancer; Res Immunol 1991 Jun-Aug;142(5-6):425-9

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INITIALS vwt

DATE MAILED 6/13/2002

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. NHL-NP-37	SERIAL NO. 10/057,311
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT JUNGHANS et al.	
(Use several sheets if necessary)		FILING DATE January 24, 2002	GROUP 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	AL						
	AM						
	AN						
	AO						
	AP						

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

6/	AQ'	Pasternak G, Hochhaus A, Schultheis B, Hehlmann R; Chronic myelogenous leukemia: molecular and cellular aspects: J Cancer Res Clin Oncol 1998;124(12):643-60
9/	AR'	Weber LW, Bowne WB, Wolchok JD, Srinivasan R, Qin J, Moroi Y, Clynes R, Song P, Lewis JJ, Houghton AN; Tumor immunity and autoimmunity induced by immunization with homologous DNA; J Clin Invest 1998 Sep 15;102(6):1258-64
10/	AS'	Surman DR, Irvine KR, Shulman EP, Allweis TM, Rosenberg SA, Restifo NJ; Generation of polyclonal rabbit antisera to mouse melanoma associated antigens using gene gun immunization; Immunol Methods; 1998 May 1;214(1-2):51-62

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INITIALS vwtDATE MAILED 6/13/2002

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
(Rev. 2-32) PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

SERIAL NO.

NHL-NP-37

10/057,311

APPLICANT

JUNGHANS et al.

FILING DATE

January 24, 2002

GROUP

1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
AL							
AM							
AN							
AO							
AP							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	AQ"	Kovarik J, et al. CpG oligodeoxynucleotides can circumvent the Th2 polarization of neonatal responses to vaccines but may fail to fully redirect Th2 responses established by neonatal priming; J Immunol. 1999 Feb 1;162(3):1611-7
12	AR"	Krieg AM, Wu T, Weeratna R, Efler SM, Love-Homan L, Yang L, Yi AK, Short D, Davis HL; Sequence motifs in adenoviral DNA block immune activation by stimulatory CpG motifs; Proc Natl Acad Sci U S A 1998 Oct 13;95(21):12631-6
✓ 13	AS"	Krieg AM, CpG DNA: a pathogenic factor in systemic lupus erythematosus?, J Clin Immunol 1995 Nov;15(6):284-92

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INITIALS vwt

DATE MAILED 6/13/2002

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. NHL-NP-37	SERIAL NO. 10/057,311
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT JUNGHANS et al.	
(Use several sheets if necessary)		FILING DATE January 24, 2002	GROUP 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	AL						
	AM						
	AN						
	AO						
	AP						

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

14	AD	Sheehan and Lan, Phosphorothioate Oligonucleotides Inhibit the Intrinsic Tenase Complex, Blood 92, 1617-1625 (1998)
15	AR	Lim et al., Sequence-independent inhibition of RNA transcription by DNA dumbbells and other decoys, 1997, Nuc. Acids Res. 25, 575-581; Blumenfeld et al., Nuc. Acids Res. 1993, 21, 3405-3411 → 581
16	AS	Weeratna R, Brazolot Millan CL, Krieg AM, Davis HL; Reduction of antigen expression from DNA vaccines by coadministered oligodeoxynucleotides. Antisense Nucleic Acid Drug Dev 1998 Aug;8(4):351-6

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INITIALS vwt

DATE MAILED 6/13/2002

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. NHL-NP-37	SERIAL NO. 10/057,311
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT JUNGHANS et al.	
(Use several sheets if necessary)		FILING DATE January 24, 2002	GROUP 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

		DOCUMENT							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
		NUMBER											YES	NO
	AL													
	AM													
	AN													
	AO													
	AP													

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

17	AQ	Immunostimulatory oligodeoxynucleotides promote protective immunity and provide systemic therapy for leishmaniasis via IL-12- and IFN-gamma-dependent mechanisms. Walker et al., Proc Natl Acad Sci USA 1999 Jun 8 96:12 6970-5.	
18	AR	CLUSEL C ET AL: "EX VIVO REGULATION OF SPECIFIC GENE EXPRESSION BY NANOMOLAR CONCENTRATION OF DOUBLE-STRANDED DUMBBELL OLIGONUCLEOTIDES" NUCLEIC ACIDS RESEARCH, 68, OXFORD UNIVERSITY PRESS, SURREY, vol. 21, no. 15, 25 July 1993 (1993-07-25), pages 3405-3411, XP000572382 ISSN: 0305-1048 the whole document	
19	AS	KRIEG A M ET AL: "OLIGODEOXYNUCLEOTIDE MODIFICATIONS DETERMINE THE MAGNITUDE OF B CELL STIMULATION BY CPG MOTIFS" ANTISENSE & NUCLEIC ACID DRUG DEVELOPMENT, US, MARY ANN LIEBERT, INC., NEW YORK, vol. 6, no. 2, 1996, pages 133-139, XP000610233 ISSN: 1087-2906 the whole document	

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INITIALS vwtDATE MAILED 6/13/2002

FORM PTO-1449 (Rev. 2-32)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. NHL-NP-37	SERIAL NO. 10/057,311
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT JUNGHANS et al.	
(Use several sheets if necessary)		FILING DATE January 24, 2002	GROUP 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
AL							
AM							
AN							
AO							
AP							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

20	AO	ERIE D ET AL.: "A DUMBBELL-SHAPED DOUBLE-HAIRPIN STRUCTURE OF DNA: A THERMODYNAMIC INVESTIGATION" BIOCHEMISTRY 1987, XP002027687 the whole document.
21	AR	Hosona et al, "PROPERTIES OF BASE-PAIRING IN THE STEM REGION OF HAIRPIN ANTISENSE OLIGONUCLEOTIDES CONTAINING 2'-METHOXYNUCLEOSIDES, BIOCHIM BIOPHYS, ACTA 244, 339-344 (1995)
27	AS	

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INITIALS vwtDATE MAILED 6/13/2002